Special Issue

Recent Advances in Emerging Transistor Technologies and Their Applications

Message from the Guest Editors

With the domain of electronics progressing at a rapid rate, research in the domain of transistor technologies becomes more critical and has expanded to include novel materials, device concepts, and integrated systems that offer enhanced functionality and performance. This Special Issue aims to highlight the key recent developments in the broader domain of emerging transistor technologies, with a focus on their fundamental properties, working mechanisms, device fabrication, performance metrics and applications such as neuromorphic computing, ternary logic design, hardware security, etc. Original research papers and review articles are welcome. The topics of interest of this Special issue include, but are not limited to, the following:

- Energy-efficient computing designs based on emerging transistor technologies.
- Design of electronic synapses and neurons for neuromorphic computing.
- Memories that utilize emerging transistors as design elements.
- Emerging transistor technology-based hardware security applications.

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Deadline for manuscript submissions

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